

## CLAIMS

[0030] What is claimed is:

1. A hand-held game machine capable of playing games designed to run on other machines.

2. A machine according to claim 1 and comprising:

a computer having hardware, an operating system, input keys and an output

unit;

a game storage unit to store said games; and

a compatibility layer to interface between said computer and the  
input/output and operational expectations of a current game.

3. A machine according to claim 2 and wherein said compatibility layer comprises an input  
mapper and at least one operating system emulator.

4. A machine according to claim 3 and wherein said input mapper comprises a converter to  
convert between said input keys and said input expectations of said current game.

5. A machine according to claim 4 and wherein said input mapper comprises conversion  
units, one per type of input device.

6. A machine according to claim 4 and wherein said input mapper comprises a request unit  
to determine a type of input device from an input request from said current game.

7. A machine according to claim 6 and wherein said input mapper selects the type of input  
device to emulate from the output of said request unit.

8. A compatibility layer for a game machine to enable said game machine to run games  
written for other machines.

9. A layer according to claim 8 and wherein said compatibility layer comprises an input mapper.

10. A layer according to claim 9 and wherein said input mapper comprises a converter to convert between input keys of said game machine and input expectations of a current game.

11. A layer according to claim 10 and wherein said input mapper comprises conversion units, one per type of input device.

12. A layer according to claim 10 and wherein said input mapper comprises a request unit to determine a type of input device from an input request from said current game.

13. A layer according to claim 12 and wherein said input mapper selects the type of input device to emulate from the output of said request unit.

14. A method for running a computer game, the method comprising:

running said game on a hand-held game machine for which it is not designed without having to rewrite said game.

15. A method according to claim 14 and wherein said running comprises converting between input keys of said game machine and input expectations of said game.

16. A method according to claim 15 and wherein said converting comprises utilizing conversion units, one per type of input device.

17. A method according to claim 15 and wherein said converting comprises determining a type of input device from an input request from said game.

18. A method according to claim 17 and wherein said converting comprises selecting the type of input device to emulate from the output of said request unit.

19. A method for running a computer game, the method comprising:

receiving on a current machine a downloaded computer game designed for a different machine than said current machine;

indicating the input devices expected by said computer game;

configuring the input devices of said current machine to act like said expected input devices; and

running said computer game with said current input devices.

20. A method according to claim 19 and wherein said running comprises converting between input devices of said game machine and input expectations of said game.
21. A method according to claim 20 and wherein said converting comprises utilizing conversion units, one per type of input device.